

REMARKS

Claims 1, 3 and 13-50 were pending in the present application. Claims 19-50 were previously withdrawn from consideration. Claim 1 has been amended. Claims 1, 3, and 13-50 are currently pending. Support for the amendments to claim 1 can be found in the specification at least at page 15, line 33. No new matter has been added.

Amendment or cancellation of claims should not be construed as an acquiescence, narrowing, or surrender of any subject matter. The amendments are being made not only to point out with particularity and to claim the present invention, but also to expedite prosecution of the present application. Applicants reserve the right to prosecute the originally filed claims further, or similar ones, in the instant or subsequently filed patent applications.

Withdrawn Rejections

Applicants respectfully acknowledge the Examiner's withdrawal of the rejection of claims 1, 3, 7-10, and 13-18 under 35 U.S.C. 112, first paragraph.

Rejections under 35 U.S.C. § 103(a)

Claims 1, 3, 14, and 16-18 remain rejected under 35 U.S.C. § 103(a) as being unpatentable over Zhong *et al.* (J. Exp. Med. 1996, 184: 2061-2066, of record) in view of Kozono *et al.* (Nature 1994, 369: 151-154, of record) and Natarajan *et al.* (J. Immunol. 1999, 162:4030-4036). Specifically, the Examiner states that “[w]ith regard to the limitation ‘PVSKMRMATPLLQA (SEQ ID NO: 1)’ recited in instant based claim 1, SEQ ID NO: 1 is comprised in the Ii 89-100 invariant chain CLIP peptide taught by the primary reference, and the said base claim recites ‘an isolated MHC class II compound comprising...a spacerholder molecule, wherein the spacerholder molecule is selected from the group consisting of PVSKMRMATPLLQA (SEQ ID NO: 1)...’. Hence the said claim encompasses a spacerholder molecule that is SEQ ID NO:1 with additional N-and/or C-terminal flanking sequences” (see the Non-Final Office Action, beginning at page 4; emphasis added).

Applicants respectfully traverse the rejection. However, solely in order to expedite prosecution and in no way conceding to the Examiner's rejection, Applicants have amended claim 1 to recite “a spacerholder molecule, wherein said spacerholder molecule is selected from the group consisting of PVSKMRMATPLLQA (SEQ ID NO:1); AAAAAAAAAA

(SEQ ID NO:2); AAAAAAAAAAAAAA (SEQ ID NO:3); AAAAAAAAAAAAAA (SEQ ID NO:4); ASMSAASAASMAA (SEQ ID NO:5); and the consensus sequence AAXAAAAAAXAA (SEQ ID NO: 36), *wherein the spaceholder molecule is 12-15 amino acid residues in length*” (emphasis added). Applicants respectfully submit that neither, Zhong *et al.*, Kozono *et al.*, nor Nataragan *et al.*, either alone or in combination, teach or suggest the presently claimed spaceholder molecules. Applicants, therefore, respectfully request that the Examiner withdraw the rejection.

The Examiner has also rejected claims 1, 3, 14, and 16-18 under 35 U.S.C. § 103(a) as being unpatentable over Zhong *et al.* (J. Exp. Med. 1996, 184: 2061-2066, of record) in view of Kozono *et al.* (Nature 1994, 369: 151-154, of record) and Natarajan *et al.* (J. Immunol. 1999, 162:4030-4036), Malcherek *et al.* (J. Exp. Med. 1995, 181: 527-436, IDS reference), and DiBrino *et al.* (J. Biol. Chem. 1994, 269(51): 32426-32434, of record). Specifically, the Examiner is of the opinion that “[w]ith regard to the limitation ‘PVSKMRMATPLLMQA (SEQ ID NO: 1)’ recited in instant based claim 1, SEQ ID NO: 1 is comprised in the Ii 89-100 invariant chain CLIP peptide taught by the primary reference, and the said base claim recites ‘an isolated MHC class II compound comprising...a spaceholder molecule, wherein the spaceholder molecule is selected from the group consisting of PVSKMRMATPLLMQA (SEQ ID NO: 1)...’.” Hence the said claim encompasses a spaceholder molecule that is SEQ ID NO:1 with additional N-and/or C-terminal flanking sequences. Also, Malcherek *et al.* teach a peptide comprising the CLIP peptide that comprises SEQ ID NO: 1” (see the Non-Final Office Action, beginning at page 7; emphasis added).

Applicants respectfully traverse the rejection. None of the references cited by the Examiner disclose the spaceholder molecules of the claims, as amended herein. Furthermore, one skilled in the art at the time of invention would have had no motivation to modify the sequences that are disclosed in Malcherek *et al.* and DiBrino *et al.* so as to generate the spaceholder sequences of the amended claims. Therefore, neither Zhong *et al.*, Kozono *et al.*, Nataragan *et al.*, Malcherek *et al.* nor DiBrino *et al.*, either alone or in combination, teach or suggest the spaceholder molecules of the amended claims. Applicants therefore respectfully request that the Examiner withdraw the rejection.

The Examiner has also rejected claims 13-15 under 35 U.S.C. § 103(a) as being unpatentable over Zhong *et al.* (J. Exp. Med. 1996, 184: 2061-2066, of record) in view of Kozono *et al.* (Nature 1994, 369: 151-154, of record) and Natarajan *et al.* (J. Immunol. 1999, 162:4030-4036) as applied to claims 1, 3, 14, and 16-18 above, and further in view of Crawford *et al.* (Immunity. 1998, 8: 675-682, IDS reference). Specifically, the Examiner states that “[i]t would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to have multimerized the complexes taught by the combined references, plus or minus the leucine zipper peptides, using the methodology of Crawford *et al.*” and that “given the open transitional language recited in instant claim 1, the references do teach the claimed invention...” (see the Non-Final Office Action, beginning at page 8).

Applicants respectfully traverse the rejection. As described above, none of the references cited by the Examiner, either alone or in combination, teach or suggest the spaceholder molecules of the amended claims. Applicants therefore respectfully request that the Examiner withdraw the rejection.

The Examiner has also rejected claims 13-15 under 35 U.S.C. § 103(a) as being unpatentable over Zhong *et al.* (J. Exp. Med. 1996, 184: 2061-2066, of record) in view of Kozono *et al.* (Nature 1994, 369: 151-154, of record), Natarajan *et al.* (J. Immunol. 1999, 162:4030-4036), Malcherek *et al.* (J. Exp. Med. 1995, 181: 527-436, IDS reference), and DiBrino *et al.* (J. Biol. Chem. 1994, 269(51): 32426-32434, of record) as applied to claims 1, 3, 14, and 16-18, and further in view of Crawford *et al.* (Immunity. 1998, 8: 675-682, IDS reference). Specifically, the Examiner states that “[i]t would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to have multimerized the complexes taught by the combined references, plus or minus the leucine zipper peptides, using the methodology of Crawford *et al.*” (see the Non-Final Office Action, beginning on page 9).

Applicants respectfully traverse the rejection. As described above, none of the references cited by the Examiner, either alone or in combination, teach or suggest the spaceholder molecules of the amended claims. Applicants therefore respectfully request that the Examiner withdraw the rejection.

CONCLUSION

In view of the foregoing remarks, Applicants submit that the pending claims are in condition for allowance. Early and favorable reconsideration is respectfully solicited. The Examiner may address any questions raised by this submission to the undersigned at (617) 832-1000. If any fees are due, the Commissioner is hereby authorized to credit any overpayment or charge any deficiencies to **Deposit Account No. 06-1448, Reference No. DFS-044.01.**

Respectfully submitted,
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